

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 January 2004 (22.01.2004)

PCT

(10) International Publication Number
WO 2004/007593 A1

(51) International Patent Classification⁷: **C08H 1/00**

(21) International Application Number:
PCT/KR2003/001369

(22) International Filing Date: 10 July 2003 (10.07.2003)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2002-0040083 10 July 2002 (10.07.2002) KR

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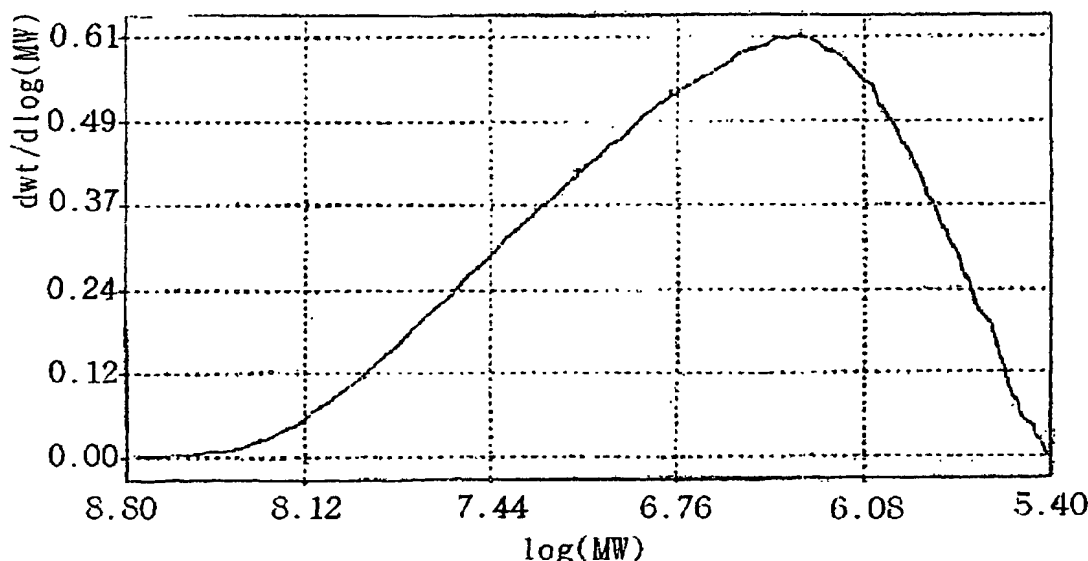
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK,

[Continued on next page]

(54) Title: POLY-GAMMA-GLUTAMATE HAVING ULTRA HIGH MOLECULAR WEIGHT AND METHOD FOR USING THE SAME



(57) Abstract: The present invention relates to a poly-gamma-glutamate (PGA) having an ultra-high molecular weight greater than 5,000 kDa. The ultra-high molecular weight PGA according to the present invention has a mean molecular weight greater than 13,000 kDa, and more than 95 % of its molecules have a molecular weight ranging from 3,000 to 15,000 kDa. Also, it can be produced by the culturing of *Bacillus subtilis* var. *chungkookjang*. The ultra-high molecular weight PGA according to the present invention shows very excellent moisture-absorbing, moisture-retaining, sustained release, mineral solubility, and water-absorbing properties, and thus, can be used as a new and high value-added material in various applications.



LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.

SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(84) **Designated States (regional):** ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*